



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,089	01/27/2006	David Lee Sandbach	9637-000079/US/NP	1013

27572 7590 10/07/2008
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

LEE, KYUNG S

ART UNIT	PAPER NUMBER
----------	--------------

2832

MAIL DATE	DELIVERY MODE
-----------	---------------

10/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,089	Applicant(s) SANDBACH ET AL.	
	Examiner Kyung Lee	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 13-16 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>012706</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 to 4, 6 to 8, 11 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Gibson et al., US Pat. 4,659,873.
3. Gibson teaches a sensor comprising at least two conductive elements 12B and 14B (fig. 5) with conductive fibers 16 and 22, electrically insulative textile fibers 42 spaced to separate the two conductive elements when no pressure is applied to the sensor.
4. Regarding claims 2 and 3, the first conductive element is surrounded by a second conductive element on the top (fig. 6) and the second conductive element is covered by a sheath.
5. Regarding claim 4, the sensor comprises a woven structure.
6. Regarding claims 6 to 8, the conductive fibers 16 and 22 are in a woven structure, where , the first conductive element is surrounded by a second conductive element on the top (fig. 6) and the second conductive element is covered by a sheath.
7. Regarding claim 11, the fibers 16 and 22 are substantially elastic, as shown in fig. 5 (not rigid).
8. Regarding claim 17 to 19, the claimed limitations are as discussed above.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5, 9 to 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson in view of Sandbach, US Pat. 6,452, 479.

11. Gibson teaches the claimed invention except for the insulating fibers to be in a woven fashion. Sandbach teaches a pressure sensor having the insulating fibers 204 in a woven shape. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sensor of Gibson with the woven structured insulating fibers, since the woven structured insulating fibers would be better at preventing unintended actuation than the parallel layered insulating fibers of Gibson. Therefore, having a market appeal.

12. Regarding claim 9, the measuring potential at one of the conductive elements involves only routine skilled in the art.

13. Regarding claim 10, Gibson discloses a data processing device in col. 1, lines 18-20.

14. Regarding claim 12, the third conductive element is 202 (fig. 2 of Sandbach), where the first conductive element 203 insulated from the second conductive element 201 and the third conductive element 202 by insulating fibers 204 and 205. The first conductive element 203 connects to one or both of the second and the third conductive element.

Art Unit: 2832

Allowable Subject Matter

15. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claimed structure of claim 13 in its entirety is neither disclosed nor suggested by the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung Lee whose telephone number is (571)272-1994. The examiner can normally be reached on M and W-F from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kyung Lee/
Primary Examiner, Art Unit 2832